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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/734,775	12/12/2003	William Stuart Gatley JR.	66745-43522	1876

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EXAMINER

BERTHEAUD, PETER JOHN

ART UNIT	PAPER NUMBER
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3746

DATE MAILED: 10/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

NT

Office Action Summary	Application No. 10/734,775	Applicant(s) GATLEY ET AL.	
	Examiner Peter J. Bertheaud	Art Unit 3746	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>1/7/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Morgan 6,474,981.

Morgan discloses a furnace blower (32) that is attachable to a separate heater, the heater blower housing (32) comprising: a fan compartment (42) in the heater blower housing; a fan (38) in the fan compartment; a motor (36) operatively connected to the fan for rotation of the fan in the fan compartment by the motor; an exhaust compartment (see Fig. 3, specifically the radial spacing 104 and the area above surface 74 but below fan 38) in the heater blower housing, the exhaust compartment communicating with the fan compartment and being positioned to receive exhaust gases from a separate heater and to direct the exhaust gases to the fan compartment (see Fig. 3), and at least a

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portion of the exhaust compartment having a layered wall with at least an interior layer, or what could be considered a heat shield (section of tube 42 that extends from 92 to end wall 58), inside the exhaust compartment and an exterior layer (34, 58) defining an exterior surface (48 and top surface of 58) of the blower housing, the interior layer (or heat shield) and the exterior layer being separate layers of the layered wall. Morgan also discloses an exhaust compartment opening (56) in the heater blower housing communicating an exterior environment of the heater blower housing with the exhaust compartment, the exhaust compartment opening being positioned on the heater blower housing to receive exhaust gases from a separate heater to which the heater blower housing is attached (see col. 2, lines 1-4); wherein the layered wall being positioned on an opposite side of the exhaust compartment from the exhaust compartment opening (see Fig 3), and a fan compartment opening (see section of 42 directly below fan 38) in the heater blower housing communicating the fan compartment with the exhaust compartment (see Fig. 3, specifically the radial spacing 104 and the area above surface 74 but below fan 38); and, the layered wall extending from adjacent the exhaust compartment opening to adjacent the fan compartment opening to direct exhaust gases from the exhaust compartment opening to the fan compartment opening (see Fig. 3).

Morgan discloses that the interior layer of the layered wall being spaced from the exterior layer of the layered wall with a hollow void (54) between the interior layer of the layered wall and the exterior layer of the layered wall. Morgan discloses the interior layer (section of tube 42 that extends from 92 to end wall 58) of the layered wall having a curved length as the layered wall extends from adjacent the exhaust compartment

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opening to adjacent the fan compartment opening, wherein the curved length of the interior layer has a concave cross section (see Fig. 3). Morgan further discloses an exhaust compartment communicating with the fan compartment and having at least a portion of a wall (34, 58) positioned to receive exhaust gases from a separate heater to which the heater blower housing is attached to direct the exhaust gases to the fan compartment; and, a heat shield (section of tube 42 that extends from 92 to end wall 58) attached to the portion of the wall inside the exhaust compartment. Morgan also discloses the heat shield being positioned between the portion of the wall (34, 58) of the exhaust compartment and the exhaust compartment opening (56).

Thus the reference reads on the claims.

4. Claims 16, 18, 19, 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Jyoraku 4,767,285.

Jyoraku discloses an electric blower including: a fan compartment (35) in the blower housing; a fan (20) in the fan compartment; a motor compartment (1) in the blower housing, the motor compartment having an inlet vent opening (6a); a motor (15) in the motor compartment, the motor being operatively connected to the fan for rotation of the fan in the fan compartment of the motor; a guard (40) mounted over the inlet vent opening, the guard having a configuration that allows ambient air to pass through the guard and then through the inlet vent opening into the motor compartment while preventing objects from being inserted through the inlet vent opening into the motor compartment (see flow arrows 61, 62, 63 in Fig. 2). Jyoraku also discloses that the inlet vent opening (6a) is positioned in a first plane; and, the guard having an opening (see

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path between disc 41 and wall 37, i.e. arrow 62) positioned in a second plane that is oriented at an angle relative to the first plane. Jyoraku further discloses the guard configuration defines a nonlinear flow path (see arrow 62) for ambient air to travel through the guard to the inlet vent opening, and wherein the guard has a side wall (45) that covers over the inlet vent opening (see col. 5, lines 29-32) and muffles noise of the motor operation in the motor compartment.

Thus the reference reads on the claims.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jyoraku 4,767,285 in view of Wille 5,610,456.

Jyoraku discloses the invention as discussed above. However, Jyoraku does not disclose an inlet vent collar on the housing, the inlet vent collar extending around the inlet vent opening; and, the guard being removably attachable to the inlet vent collar.

Wille teaches a direct current motor assembly including a motor (10), a motor case (10), and a fan hub (78). Wille also teaches an inlet vent collar (see back of housing 18) on the housing, the inlet vent collar extending around the inlet vent opening (74); and, the guard (26) being removably attachable to the inlet vent collar. Wille further

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teaches that this would be advantageous because the flow through the guard apertures (70) would be slower than the flow through the inlet vent opening (74), thereby promoting increased heat transfer and local cooling of the brushes and commutator.

Therefore, it would have been obvious to one skilled in the art at the time of invention to modify the motor assembly of Jyoraku by attaching the guard to a vent collar that encircles the motor vent, as taught by Wille, in order to promote increased heat transfer and local cooling of the brushes and commutator (see col. 6, lines 47-54).

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. These references are noted in the attached form 892.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter J. Bertheaud whose telephone number is (571) 272-3476. The examiner can normally be reached on M-F 9am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ehud Gartenberg can be reached on (571) 272-4828. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



PJB



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